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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/376,875	08/18/1999	GREGORY M. CHRYSLER	884.148US1	7059
21186	7590	03/09/2004	EXAMINER	
SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A. P.O. BOX 2938 MINNEAPOLIS, MN 55402			ATKINSON, CHRISTOPHER MARK	
			ART UNIT	PAPER NUMBER

3753

DATE MAILED: 03/09/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/376,875

Applicant(s)

Chrysler et al.

Examiner

RHK/hsin

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— The MAILING DATE of this communication appears on the cover sheet with the correspondence address —

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12/15/03 + 1/28/03
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5-9 and 22-43 is/are pending in the application.
- 4a) Of the above, claim(s) 1-3, 5-9, 25-26 + 33-35 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 22-24, 27-32 and 36-43 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 8/28/03 is/are a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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Response to Amendment

Applicant's arguments filed 8/28/2003 have been fully considered but they are not persuasive.

Claims 1-3, 5-9, 25-26 and 33-35 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made without traverse in Paper No. 4.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. § 103, the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 C.F.R. § 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of potential 35 U.S.C. § 102(f) or (g) prior art under 35 U.S.C. § 103.

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Claims 22-24 and 27 are rejected under 35 U.S.C. § 103 as being unpatentable over Jean or Morosas in view of Lee and Wyler et al.

The patent of Jean, in Figures 3-6, and the patent of Morosas, in Figures 1-5 disclose all the claimed features with the exception of a clip, the claimed aspect ratio and the folded fin having arches.

The patent of Lee discloses that it is known to have a folded fin having semi-circular arches and an aspect ratio within the claimed range for the purpose of reducing pressure losses within the fluid flowing over the arches. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ in Jean or Morosas semi-circular arches and an aspect ratio within the claimed range for the purpose of reducing pressure losses within the fluid flowing over the arches as disclosed in Lee. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the claimed materials, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

The patent of Wyler et al. in at least figure 12 discloses that it is known to have a clip which couples physically and thermally a heat sink/fins to a base for the purpose of providing a secure and elastic connection between the heat sink and the base. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ in Jean or Morosas as modified, a clip which couples physically and thermally the heat sink/fins to the base

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for the purpose of obtaining a secure and elastic connection between the heat sink and the base as disclosed in Wyler et al.

Claims 28-31 and 36-43 are rejected under 35 U.S.C. § 103 as being unpatentable over Jean or Morosas in view of Lee and Bishop et al.

The patent of Jean, in Figures 3-6, and the patent of Morosas, in Figures 1-5 disclose all the claimed features with the exception of the claimed aspect ratio, the folded fin having arches and a second fan.

The patent of Lee discloses that it is known to have a folded fin having semi-circular arches and an aspect ratio within the claimed range for the purpose of reducing pressure losses within the fluid flowing over the arches. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ in Jean or Morosas semi-circular arches and an aspect ratio within the claimed range for the purpose of reducing pressure losses within the fluid flowing over the arches as disclosed in Lee. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the claimed materials, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

The patent of Bishop et al. in Figure 1 discloses that it is known to have first and second fans for the purpose of enhancing the convective heat transfer of the heat sink. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to

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employ in Jean or Morosas as modified, a second fan for the purpose of enhancing the convective heat transfer of the heat sink as disclosed in Bishop et al.

Claim 32 is rejected under 35 U.S.C. § 103 as being unpatentable over Jean or Morosas in view of Lee and Bishop et al. as applied to claims 28-31 and 36-43 above, and further in view of Yeh or Wyler et al. The device of Jean or Morosas as modified, fail to teach a second fan and/or the fan attached to the front.

The patent's of Yeh, in figure 2, and Wyler et al., in at least figure 12, discloses that it is known to have a clip which couples physically and thermally a heat sink/fins to a base for the purpose of providing a secure and elastic connection between the heat sink and the base. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ in Jean or Morosas as modified, a clip which couples physically and thermally the heat sink/fins to the base for the purpose of obtaining a secure and elastic connection between the heat sink and the base as disclosed in Yeh and Wyler et al.

Response to Arguments

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, it

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would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ in Jean or Morosas semi-circular arches and an aspect ratio within the claimed range for the purpose of reducing pressure losses within the fluid flowing over the arches as disclosed in Lee; it would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ in Jean or Morosas as modified, a clip which couples physically and thermally the heat sink/fins to the base for the purpose of obtaining a secure and elastic connection between the heat sink and the base as disclosed in Wyler et al.; it would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ in Jean or Morosas as modified, a second fan for the purpose of enhancing the convective heat transfer of the heat sink as disclosed in Bishop et al; it would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ in Jean or Morosas as modified, a clip which couples physically and thermally the heat sink/fins to the base for the purpose of obtaining a secure and elastic connection between the heat sink and the base as disclosed in Yeh and Wyler et al.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Jean, not Lee, is relied upon in the above rejections to teach openings in the fins. Also, the Bishop et al. reference, not Jean or Morosas, is relied upon to teach first and second fans. The test for obviousness is not whether the

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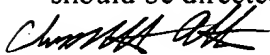
features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for response to this final action is set to expire THREE MONTHS from the date of this action. In the event a first response is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event will the statutory period for response expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher Atkinson whose telephone number is (703) 308-2603.



C.A.

February 25, 2004

CHRISTOPHER ATKINSON
PRIMARY EXAMINER